

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PHNL040281WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IB2005/050746	International filing date (<i>day/month/year</i>) 01 March 2005 (01.03.2005)	Priority date (<i>day/month/year</i>) 08 March 2004 (08.03.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 7 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability.	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 100%;">Date of issuance of this report 13 September 2006 (13.09.2006)</td> </tr> <tr> <td>Authorized officer <div style="text-align: right; font-weight: bold;">Cecile Chatel</div></td> </tr> <tr> <td>e-mail: pt13@wipo.int</td> </tr> </table>	Date of issuance of this report 13 September 2006 (13.09.2006)	Authorized officer <div style="text-align: right; font-weight: bold;">Cecile Chatel</div>	e-mail: pt13@wipo.int
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e-mail: pt13@wipo.int				

PATENT COOPERATION TREATY

REC'D 08 JUN 2005

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From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2005/050746

International filing date (day/month/year)
01.03.2005

Priority date (day/month/year)
08.03.2004

International Patent Classification (IPC) or both national classification and IPC
H01J61/82, H01J61/12, H01J61/34

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the International application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050746

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050746

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	7,13,14
	No: Claims	1-6,8-12
Inventive step (IS)	Yes: Claims	7
	No: Claims	13,14
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

.Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2005/050746

The following documents are referred to:

D1= US-A-2003/0102808

D2= WO-A-02/091428

D3= US-A-6 536 918

D4= US-A-6 469 446

Re item V:

Novelty:

1. D1 (see paragraphs 24-29) discloses a ceramic metal halide lamp with an outer envelope and an ionizable salt comprising the following components (see tables in paragraphs 25 and 29):

- Na-halide, 45-86 mol%
- TlI-halide, 2-5 mol%
- an alkaline earth metal (preferably calcium) halide, 15-45 mol%, and
- rare earth halides (preferably iodides) 0-15 mol%.

The halides are preferably iodides (see table 29).

Any of the rare earth halides (preferably as iodides) may be used in the lamp (see paragraph 24). The lamps may be cesium-free (see cells A and B according to the table in paragraph 29). The lamp also contains mercury and a noble gas.

The subject-matter of claims 1-6, 8, and 12, lack therefore novelty in view of D1 (Article 33.2 PCT).

2. D2 discloses a ceramic metal halide lamp with an ionizable salt filling containing NaI, TlI, CaI_2 , and the rare earth iodides DyI_3 , HoI_3 , TmI_3 (MasterColor (R) series, see D2, page 1, lines 21).

The lamps disclosed in D2 further have a wall load and a vessel geometry as defined in the present claims 9-11 (see D2, page 9, lines 19-27; page 6, lines 21-30; page 10, line 21, to page 11, line 24).

The subject-matter of claims 1, 2, 4-6, and 8-12, lacks therefore novelty in view of D2.

3. The subject-matter of claims 7, 13, and 14, is not disclosed in any of the cited

documents and is therefore new.

Inventive step:

1. The rated power of the MasterColor (R) series lamps ranges from 20 to 150 W (see D2, page 1, lines 20-21). It is stated in D2 that these lamps are used for general lighting applications.

However, it is known from D3 that low wattage (eg. 20 Watt) metal halide lamps are suitable for use in automotive applications, eg. for vehicle headlamps (see eg. D3, column 5, lines 19-24). It appears therefore that the person skilled in the art would consider to use low wattage lamps according to D2 for the use in automobile vehicles, due to its good colour rendering properties.

The subject-matter of claims 13 and 14 lacks therefore an inventive step in view of D2 and D3 (Article 33.3 PCT).

2. The subject-matter of claim 7 is not obvious in view of D2 and any of the other documents of the search report.

D4 discloses a lamp with an ionizable fill according to present claim 1 (see 2nd exemplary embodiment in table I). The colour temperature of this lamp is 3100 K). The ionizable filling may additionally contain indium or manganese iodide (see column 3, lines 18-21). There is no indication that exactly indium or manganese iodide should be added to the lamps according to D2 (color temperature above 3500 K) in order to improve the electrical performance.

The subject-matter of claim 7 meets therefore the requirements of Article 33.3 PCT.

Industrial applicability:

Industrial applicability is obvious.

Re item VII:

In order to meet the requirements of Rule 5.1.a.ii PCT, the most relevant prior art documents should be identified in the description.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2005/050746
